

# CD69 antibody - middle region

Rabbit Polyclonal Antibody

Catalog # AI14909

## Product Information

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<b>Application</b>	WB
<b>Primary Accession</b>	<a href="#">Q07108</a>
<b>Other Accession</b>	<a href="#">NM_001781</a> , <a href="#">NP_001772</a>
<b>Reactivity</b>	Human, Mouse, Rat, Dog, Guinea Pig
<b>Predicted</b>	Human, Mouse, Rat, Dog
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Calculated MW</b>	22559

## Additional Information

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<b>Gene ID</b>	969
<b>Alias Symbol</b> <b>Other Names</b>	CLEC2C, AIM, EA1, MLR-3, GP32/28, BL-AC/P26 Early activation antigen CD69, Activation inducer molecule, AIM, BL-AC/P26, C-type lectin domain family 2 member C, EA1, Early T-cell activation antigen p60, GP32/28, Leukocyte surface antigen Leu-23, MLR-3, CD69, CD69, CLEC2C
<b>Format</b>	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
<b>Reconstitution &amp; Storage</b>	Add 50 ul of distilled water. Final anti-CD69 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.
<b>Precautions</b>	CD69 antibody - middle region is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

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<b>Name</b>	CD69
<b>Synonyms</b>	CLEC2C
<b>Function</b>	Transmembrane protein expressed mainly on T-cells resident in mucosa that plays an essential role in immune cell homeostasis. Rapidly expressed on the surface of platelets, T-lymphocytes and NK cells upon activation by various stimuli, such as antigen recognition or cytokine signaling, stimulates different signaling pathways in different cell types (PubMed: <a href="#">24752896</a> , PubMed: <a href="#">26296369</a> , PubMed: <a href="#">35930205</a> ). Negatively regulates Th17 cell differentiation through its carbohydrate dependent interaction with

galectin-1/LGALS1 present on immature dendritic cells (PubMed:[24752896](#)). Association of CD69 cytoplasmic tail with the JAK3/STAT5 signaling pathway regulates the transcription of RORgamma/RORC and, consequently, differentiation toward the Th17 lineage (By similarity). Also acts via the S100A8/S100A9 complex present on peripheral blood mononuclear cells to promote the conversion of naive CD4 T-cells into regulatory T-cells (PubMed:[26296369](#)). Acts as an oxidized low-density lipoprotein (oxLDL) receptor in CD4 T- lymphocytes and negatively regulates the inflammatory response by inducing the expression of PDCD1 through the activation of NFAT (PubMed:[35930205](#)). Participates in adipose tissue-derived mesenchymal stem cells (ASCs)-mediated protection against P.aeruginosa infection. Mechanistically, specifically recognizes P.aeruginosa to promote ERK1 activation, followed by granulocyte-macrophage colony-stimulating factor (GM-CSF) and other inflammatory cytokines secretion (PubMed:[34841721](#)). In eosinophils, induces IL-10 production through the ERK1/2 pathway (By similarity). Negatively regulates the chemotactic responses of effector lymphocytes and dendritic cells (DCs) to sphingosine 1 phosphate/S1P by acting as a S1PR1 receptor agonist and facilitating the internalization and degradation of the receptor (PubMed:[37039481](#)).

#### Cellular Location

Cell membrane; Single-pass type II membrane protein

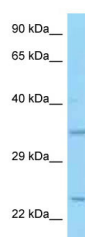
#### Tissue Location

Expressed on the surface of activated T-cells, B- cells, natural killer cells, neutrophils, eosinophils, epidermal Langerhans cells and platelets

## References

Hamann J.,et al.J. Immunol. 150:4920-4927(1993).  
 Lopez-Cabrera M.,et al.J. Exp. Med. 178:537-547(1993).  
 Ziegler S.F.,et al.Eur. J. Immunol. 23:1643-1648(1993).  
 Santis A.,et al.Eur. J. Immunol. 24:1692-1697(1994).  
 Natarajan K.,et al.Biochemistry 39:14779-14786(2000).

## Images



WB Suggested Anti-CD69 Antibody Titration: 1.0 µg/ml  
 Positive Control: HCT15 Whole Cell

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.